SEQUENCE LISTING

<110> THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
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<120> ANTI-MICROBIAL TARGETING CHIMERIC PHARMACEUTICAL

<130> 2101363-991600

<150> US 10/077,624
<151> 2002-02-14

<150> US 09/910,358
<151> 2001-07-19

<150> US 09/378,577
<151> 1999-08-20

<160> 71

<170> PatentIn version 3.1

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accactcgca cagaggatac tctggtggcg gtggctcggg cggaggtggg tcgggtggcg   180

gcggatccga cgtgaagctt gtggagtctg ggggaggctt agtgaaccct ggagggtccc   240

tgaaactctc ctgtgcagcc tctggattca ctttcagtag ctataccatg tcttgggttc   300

gccagactcc ggagaagagg ctggagtggg tcgcatccat tagtagtggt ggtacttaca   360

cctactatcc agacagtgtg aagggccgat tcaccatctc cagagacaat gccaagaaca   420

ccctgtacct gcaaatgacc agtctgaagt ctgaggacac agccatgtat tactgttcaa   480

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            20              25              30

Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Lys Leu Val Glu Ser Gly
            35              40              45

Gly Gly Leu Val Asn Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala
        50              55              60

Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met Ser Trp Val Arg Gln Thr
65              70              75              80

Pro Glu Lys Arg Leu Glu Trp Val Ala Ser Ile Ser Ser Gly Gly Thr
            85              90              95

Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg
            100             105             110

Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Thr Ser Leu Lys Ser
        115             120             125

Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp Gly Ser Tyr Gly
    130             135             140

Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr
145             150             155             160

Val Ser Ser Ala Ser
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gtggctcggg cggaggtggg tcgggtggcg gcggatccga cgtgaagctt gtggagtctg      180
ggggaggctt agtgaaccct ggagggtccc tgaaactctc ctgtgcagcc tctggattca      240
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ctttcagtag ctataccatg tcttgggttc gccagactcc ggagaagagg ctggagtggg    300

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tcaccatctc cagagacaat gccaagaaca ccctgtacct gcaaatgacc agtctgaagt    420

ctgaggacac agccatgtat tactgttcaa gagatgacgg ctcctacggc tcctattact    480

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Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val
                20                  25                  30


Lys Leu Val Glu Ser Gly Gly Gly Leu Val Asn Pro Gly Gly Ser Leu
            35                  40                  45


Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met
        50                  55                  60


Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Ser
65                  70                  75                  80


Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly
                85                  90                  95


Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
                100                 105                 110


Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg
            115                 120                 125


Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly
            130                 135                 140


Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser
145                 150                 155
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Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu
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Lys His His Ser His Arg Gly Tyr
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<210>  6
<211>  14
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Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr
1   5   10

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<210>  9
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ccagtgtgat agcc                                                        74


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<400>  10
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cggatccgac gtgaagcttg tggagtc                                          87


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cgcaagtac                                                              69


<210>  12
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<220>
<223>  Primer 991

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tccag                                                                  65


<210>  13
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<220>
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<223>  Xaa is Val, Gln or His


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<222>  (2)..(2)
<223>  Xaa is Pro or His


<220>
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<222>  (5)..(5)
<223>  Xaa is Phe or Tyr


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<222>  (6)..(6)
<223>  Xaa is Lys or His


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<222>  (7)..(7)
<223>  Xaa is His or Ala


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<222>  (8)..(8)
<223>  Xaa is Leu or His


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<223>  Xaa is any amino acid


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<223>  Xaa is Lys or Arg
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Arg Gly Gly Arg Leu Cys Tyr Cys Arg Arg Arg Phe Cys Val Cys Val
1               5                   10                  15

Gly Arg


<210>  16
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<223>  Novispirin G10

<400>  16

Lys Asn Leu Arg Arg Ile Ile Arg Lys Gly Ile His Ile Ile Lys Lys
1               5                   10                  15

Tyr Gly


<210>  17
<211>  15
<212>  PRT
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<220>
<223>  Linker peptide

<400>  17

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
1               5                   10                  15


<210>  18
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<211>   8
<212>   PRT
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<220>
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<400>   18

Gly Gly Gly Ser Gly Gly Gly Ser
1               5


<210>   19
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<220>
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<400>   19
cgtggcggtc gcctatgcta ctgtcgacgt cgcttttgcg tatgcgtggg acggtct        57


<210>   20
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gggaattccg tggcggtcgc ctatgctac                                       29


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agagccgcca cccgaacctc cgcctgaaga gacggtgact gagg                      44


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Val Pro His Glu Phe Lys His Leu Gln Met Lys Pro
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<400>   25
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Val Pro His Glu Phe Lys His Leu Gln Met Lys Pro
1   5   10

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His His His Lys Ala Leu Ala Pro Thr Val Thr Gly
1   5   10

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<400>   27
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Val Pro His Glu Phe His Ala His Arg Gly Arg Leu

1   5   10

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<400> 28

Val Pro His Glu Phe Lys His Leu Gln Met Lys Pro
1   5   10

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<400> 29

Gln Pro His Pro His Lys Val His Ser Leu Pro Pro
1   5   10

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<400> 30

Val Pro His Glu Phe His Ala His Arg Gly Arg Leu
1   5   10

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<400> 31

Val Pro His Glu Phe His Ala His Arg Gly Arg Leu
1   5   10

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<400>   32

His His Leu His Tyr Asn Pro Ala Phe Pro Gly Leu
1   5   10

<210>   33
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Gln Pro Ala Pro Tyr Ile Ser Ser Pro Ser Ala Ser
1   5   10

<210>   34
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Val Arg Leu Pro Leu Trp Leu Pro Ser Leu Asn Glu
1   5   10

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<400>   35

Ala Asn Tyr Phe Leu Pro Pro Val Leu Ser Ser Ser
1   5   10

<210>   36
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Ser His Pro Trp Asn Ala Gln Arg Glu Leu Ser Val

1   5   10

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<400> 37

Ser Val Ser Val Gly Met Arg Pro Met Pro Arg Pro
1   5   10

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<400> 38

Trp Thr Pro Leu His Pro Ser Thr Asn Arg Pro Pro
1   5   10

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Ser Val Ser Val Gly Met Lys Pro Ser Pro Arg Pro
1   5   10

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Ser Val Ser Val Gly Met Lys Pro Ser Pro Arg Pro
1   5   10

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1   5   10

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<400> 44

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1   5   10

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Ser Tyr Tyr Ser Leu Pro Pro Ile Phe His Ile Pro
1               5                   10


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<400>  47

Phe Ser Tyr Ser Pro Thr Arg Ala Pro Leu Asn Met
1               5                   10


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Ser Val Ser Val Gly Met Lys Pro Ser Pro Arg Pro
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His Ile His Ser Leu Ser Pro Ser Lys Thr Trp Pro
1   5   10

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Thr Ile Thr Pro Thr Asp Ala Glu Met Pro Phe Leu
1   5   10

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His Leu Leu Glu Ser Gly Val Leu Glu Arg Gly Met
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His Asp Arg Tyr His Ile Pro Pro Leu Gln Leu His
1   5   10

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Val Asn Thr Leu Gln Asn Val Arg His Met Ala Ala
1   5   10

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Ser Asn Tyr Met Lys Leu Arg Ala Val Ser Pro Phe
1   5   10

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<400> 59

Asn Leu Gln Met Pro Tyr Ala Trp Arg Thr Glu Phe
1   5   10

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<400> 60

Gln Lys Pro Leu Thr Gly Pro His Phe Ser Leu Ile
1   5   10

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<400> 61

Lys Lys His Arg Lys His Arg Lys His Arg Lys His
1   5   10

<210> 62
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<220>
<223> Design peptide

<400> 62

Arg Gly Leu Arg Arg Leu Gly Arg Arg Gly Leu Arg Arg Leu Gly Arg
1   5   10   15

<210> 63
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<400> 63

Lys Pro Val Leu Pro Val Leu Pro Val Leu Pro Val Leu
1   5   10

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<220>
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<400> 64

Val Leu Arg Ile Ile Arg Ile Ala Val Leu Arg Ile Ile Arg Ile Ala
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Leu Pro Glu Thr Gly Gly Ser Gly Gly Ser Leu Pro Glu Thr Gly
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<400> 66

Arg Ala His Ile Arg Arg Ala His Ile Arg Arg
1   5   10

<210> 67
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<400> 67

Asp Glu Asp Glu Asp Asp Glu Glu Asp Asp Asp Glu Glu Glu
1   5   10

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Ser Thr Met Cys Gly Ser Thr Met Cys Gly Ser Thr Met Cys Gly
1   5   10   15

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<400> 69

Gly Gly Ser Gly Gly
1   5

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<223> Fusion peptide

<400> 70

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Gly Ser Lys Asn Leu Arg Arg Ile Ile Arg Lys Gly Ile His Ile Ile
                20   25   30

Lys Lys Tyr Gly
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<223> Fusion peptide

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Lys Asn Leu Arg Arg Ile Ile Arg Lys Gly Ile His Ile Ile Lys Lys
1   5   10   15

Tyr Gly Gly Gly Ser Gly Gly Ser Lys Lys His Arg Lys His Arg Lys
                20   25   30

His Arg Lys His
        35